

## INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)			ATTY DOCKET NO. 2000_1388	SERIAL NO. 09/677,421			
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			APPLICANT Mitsuaki OSHIMA et al.				
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			FILING DATE October 5, 2000		GROUP 2634		
JUL 11 2005 Date Submitted to PTO: July 11, 2005							
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	3,824,548	7-16-74	Sullivan et al.	—	—	—
	AB	3,959,726	5-25-76	Hinoshita et al.	—	—	—
	AC	4,303,939	12-1-81	Stephens et al.	—	—	—
	AD	4,303,941	12-1-81	Marti et al.	—	—	—
	AE	4,309,726	1-5-82	Tanaka et al.	—	—	—
	AF	4,535,352	8-85	Haskell	—	—	—
	AG	4,564,858	1-14-86	Resch	—	—	—
	AH	4,581,639	4-8-86	Judge	—	—	—
DH	AI	4,769,819	9-6-88	Matsutani et al.	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	57-39629	3-4-82	Japan	—	—	abstract
	AK	58-161427	9-26-83	Japan	—	—	abstract
	AL	58-161547	9-26-83	Japan	—	—	abstract
	AM	61-70861	4-11-86	Japan	—	—	abstract
DH	AN	63-180222	7-25-88	Japan	—	—	abstract
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
DH	AO	Masafumi SAITO et al., "Bit Error Rate Characteristics of OFDM in Multipath Environment", 1991					
DH	AP	Ryutaro OHMOTO et al., " $\pi/4$ -shift QPSK Subcarrier Transmission", 1991					
DH	AQ	J. A. C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come", IEEE Communications Magazine, Vol. 28, May 1990, pages 5-8 and 11-14					
EXAMINER <i>D. L. Bell</i>			DATE CONSIDERED		08/04/05		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	4,794,447	12-27-88	Tsinberg	—	—	—
	AB	4,800,426	1-24-89	Glenn	—	—	—
	AC	4,817,192	3-28-89	Phillips et al.	—	—	—
	AD	5,007,088	4-9-91	Ooi et al.	—	—	—
	AE	5,029,003	7-91	Jonnalagadda	—	—	—
	AF	5,038,402	8-6-91	Robbins	—	—	—
	AG	5,063,445	11-5-91	Nishizawa et al.	—	—	—
	AH	5,128,758	7-7-92	Azadegan et al.	—	—	—
DH	AI	5,134,464	7-28-92	Basile et al.	—	—	—

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	2-94814	4-5-90	Japan	—	—	abstract
	AK	2-218279	8-30-90	Japan	—	—	abstract
	AL	2-260726	10-23-90	Japan	—	—	X
	AM	3-48587	3-1-91	Japan	—	—	abstract
DH	AN	3-69295	3-25-91	Japan	—	—	X

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DH	AO	B. Hirosaki, "An Orthogonally Multiplexed QAM System Using the Discrete Fourier Transform", IEEE Transactions on Communications, Vol. Com-29, No. 7, July 1981, pages 982-989
DH	AP	L. J. Cimini, Jr., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing", IEEE Transactions on Communications, Vol. Com-33, No. 7, July 1985, pages 665-675 and Annex
	AQ	

EXAMINER

*Daniel L. Miller*

DATE CONSIDERED

08/04/05

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,170,413	12-8-92	Hess et al.	—	—	—
	AB	5,181,112	1-19-93	Citta et al.	—	—	—
	AC	5,214,656	5-1993	Chung et al.	—	—	—
	AD	5,218,622	6-8-93	Fazel et al.	—	—	—
	AE	5,377,051	12-27-94	Lane et al.	—	—	—
	AF	5,400,084	3-21-95	Scarpa	—	—	—
	AG	5,802,241	9-1-98	Oshima	—	—	—
	AH	5,576,902	11-19-96	Lane et al.	—	—	—
DH	AI	5,598,220	1-97	Citta et al.	—	—	—

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	91/20137	12-26-91	WO	—	—	X
DH	AK	92/22162	12-10-92	WO	—	—	X
	AL						
	AM						
	AN						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	
	AP	
	AQ	

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*Danville*

DATE CONSIDERED

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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,638,112	6-10-97	Bestler et al.	—	—	—
	AB	5,819,000	10-6-98	Oshima	—	—	—
	AC	5,892,879	4-6-99	Oshima	—	—	—
	AD	5,999,569	12-7-99	Oshima	—	—	—
	AE	6,049,651	4-11-00	Oshima	—	—	—
DH	AF	6,256,357	7-3-01	Oshima	—	—	—
	AG						
	AH						
	AI						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	2,095,435	5-10-92	Canada	—	—	X
	AK						
	AL						
	AM						
	AN						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	
	AP	
	AQ	

EXAMINER

*D. Hall*

DATE CONSIDERED

*08/06/05*